

SIEMENS

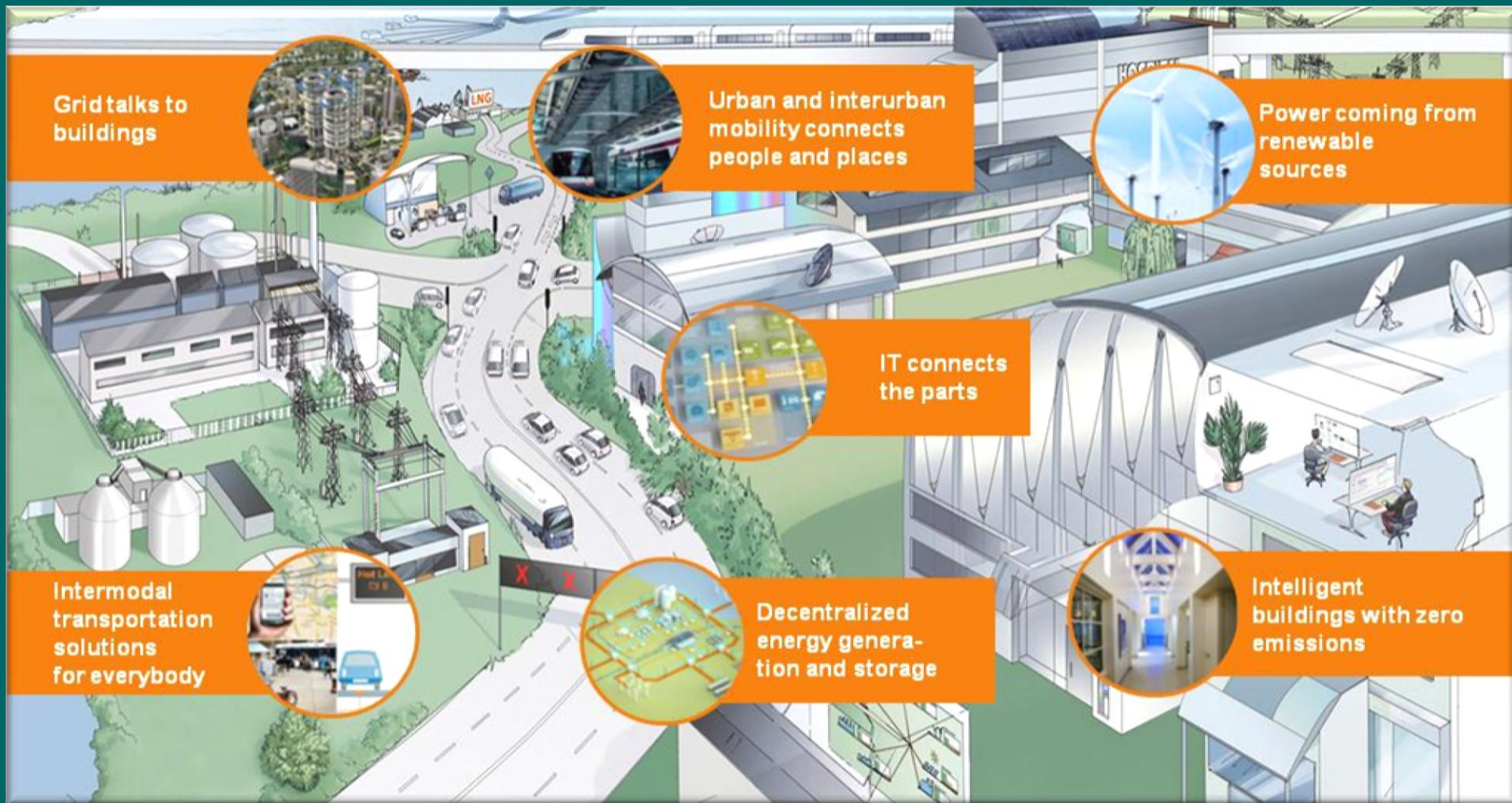


Siemens Smart City Solutions

Performance Based Outcomes for Cities

EES - Working on the City of Tomorrow

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Vision & Value Proposition

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Vision

Siemens is recognized as the #1 strategic partner in North America for:

- Energy Strategy and Solutions
- Sustainability
- Smart Communities

Value Proposition

- Siemens is the only energy services company with the global experience and local presence and unique portfolio dedicated to cities and states of all sizes in North America.
- Our experience has lead us to be a national leader in leveraging innovation to drive economic development, job creation, work force development, and STEM education utilizing a diverse local partners.

Energy and Environmental Solutions

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City



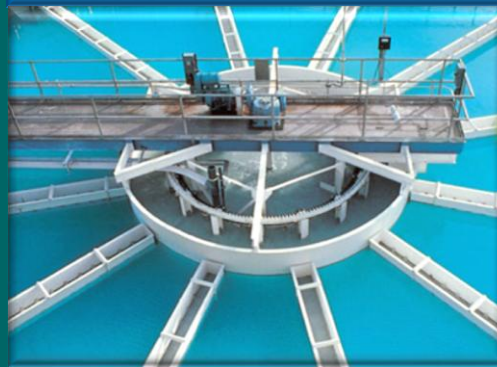
Streets



Buildings



**Water and
Waste Water Treatment**



**Alternative,
Renewable Energy**



Our Expertise

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• Water Meter/AMI Systems	• Mechanical Systems
• Water/Waste Water Plant Efficiency	• Building Automation
• Domestic Water Conservation	• Building Weatherization
• Renewable Energy	• Distributed Generation
• Cogeneration	• Interior Lighting & Controls
• Security and Life Safety Systems	• Street / Traffic Light Retrofits
Smart City Communications	

- ✓ **Resiliency**
- ✓ **Sustainability**
- ✓ **Economic Improvement**



“Frankenpoles”



City's Vertical Real Estate

- **Street light poles becoming real estate for multiple city services**
 - Photocell Lighting Controls
 - Intersection Cameras
 - AMI Collector/ Repeaters
 - Gunshot Detection Systems
 - Cellular
 - Wi-Fi
- **Multiple Asset Investments**
- **Service Contracts**

Smart City Communications

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A Completely Integrated Technology Platform



Only Fully Integrated Networking Solution

Easy Installation

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**Installed in 30 Seconds
Replaces Existing Photocell**



City Wide WI-FI Network

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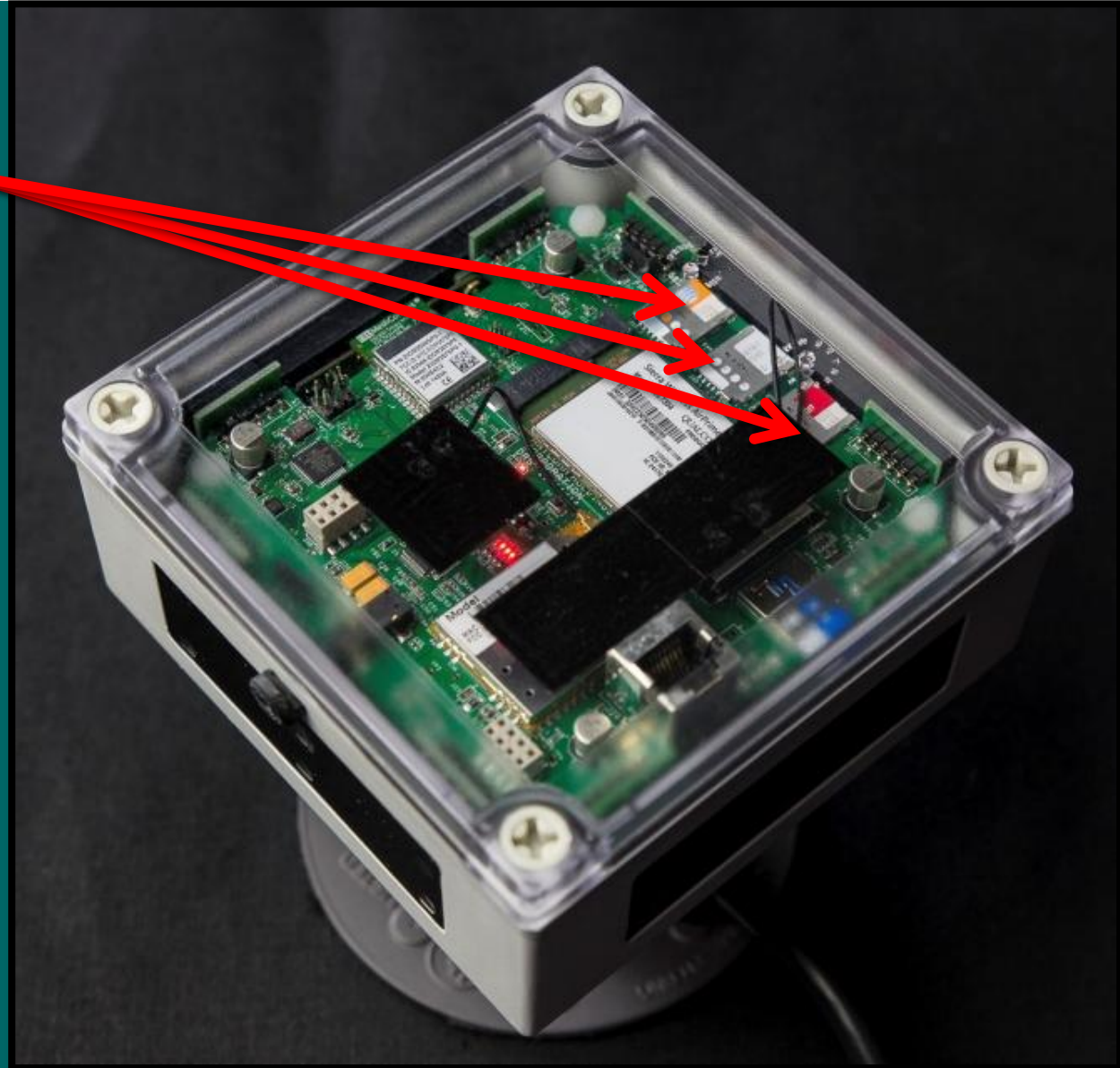
- **Wi-Fi Mesh Network**
- **Private or Public Wi-Fi Network**
- **“Hot Spot” Range 1000 Feet**
 - ✓ **Current Wi-Fi 802.11AC at 1.6 Mb**
 - ✓ **Designed to Handle 2.8 Mb**
- **GPS and Digital Location**
- **2048 bit Encryption**
- **AMI Application**



Cellular / Mobile Carriers

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- Ready for Mobile Carriers
- Revenue Generation from Cellular Carriers
- Path to a City-Wide Micro Cell System
- “Last Mile” Content Delivery System (*final leg of telecommunications*)
 - ✓ Fiber Optic Access
 - ✓ (Netflix, Time Warner, Comcast)





- **Energy**

- Energy Reduction with Demand Response
- Robust Photocell Features
- Advanced Lighting Control
- Sub-Metering at Each Light Pole
- Utility Grade Meter

- **Environmental**

- External Environmental Sensors
- Data Reporting on Air Quality
- Temperature Monitor
- Chemical Detection
- Seismic Detection



Public Safety

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- 360° HD Video (40 day local recording)
- Easily Turned Off or On - All or Individually
- Emergency Response & Situational Awareness
- Individual Patrolling and Facial Recognition
- VOIP for City Department Radios
- Gunshot and Vandalism Detection
- HD Microphones / Public Address
- Crowd Detection and Counting
- Audio Streaming Messaging System
- Emergency Response Full Color LED

Durability

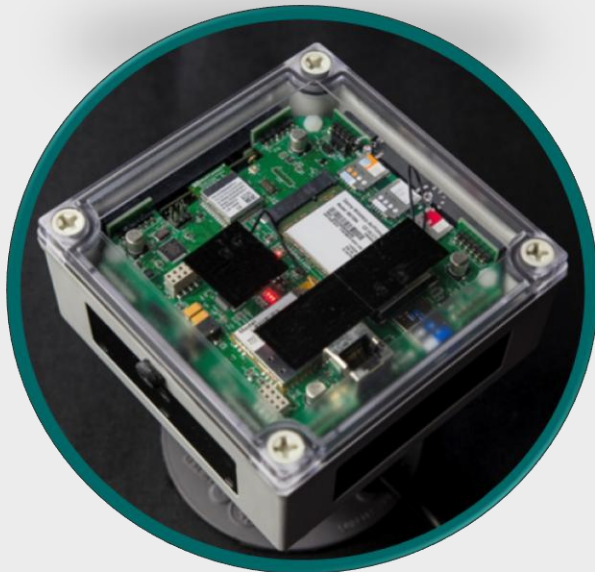
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- Made in America
- Components Designed to last 100K hours 10 yrs
- anyCOMM has Tested Device for 6 yrs
- Exterior Combination of Polycarbonate and Glass
- Same as Utility Box Encasements
- Compound Field Tested for 18 yrs
- 12 hour Battery Backup
- Current Pilot Projects
 - ✓ San Jose, CA
 - ✓ Martinez, CA
 - ✓ Elk Grove, CA
 - ✓ Atlanta GA

Summary

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- **Only Fully Integrated Networking Solution**
- **Solution Contained in a Single Node Device**
- **Mountable in (30) seconds**
- **No Provisioning or Setup Required**
- **Multiple Departmental Uses**
 - ✓ **City Wide Wi-Fi+**
 - ✓ **Telecommunication Opportunities**
 - ✓ **Public Safety Cameras**
 - ✓ **Gun Shot Technology**
 - ✓ **Graffiti Detection**
 - ✓ **Emergency Alert Notifications**
 - ✓ **Smart Metering - Utility Bill Management**
- **Lifetime Warranty**
- **No On Going Service for Node Needed**

Competitor Systems... *have only some of the features*



- **Acuity Roam Network from GE**

- ✓ Comprehensive controls platform with dimming, scheduling, fixture monitoring, and some communications
- ✓ Relies on third parties for additional functions



- **Philips / Ericsson Zero Site**

- ✓ Philips provides SmartPole with Ericsson-developed node.
- ✓ Combines lighting controls and cellular



- **Silver Springs**

- ✓ Offers low data networking platform for a variety of city services
- ✓ Relies on a network of partner for specific technologies and features.



- **Sensus**

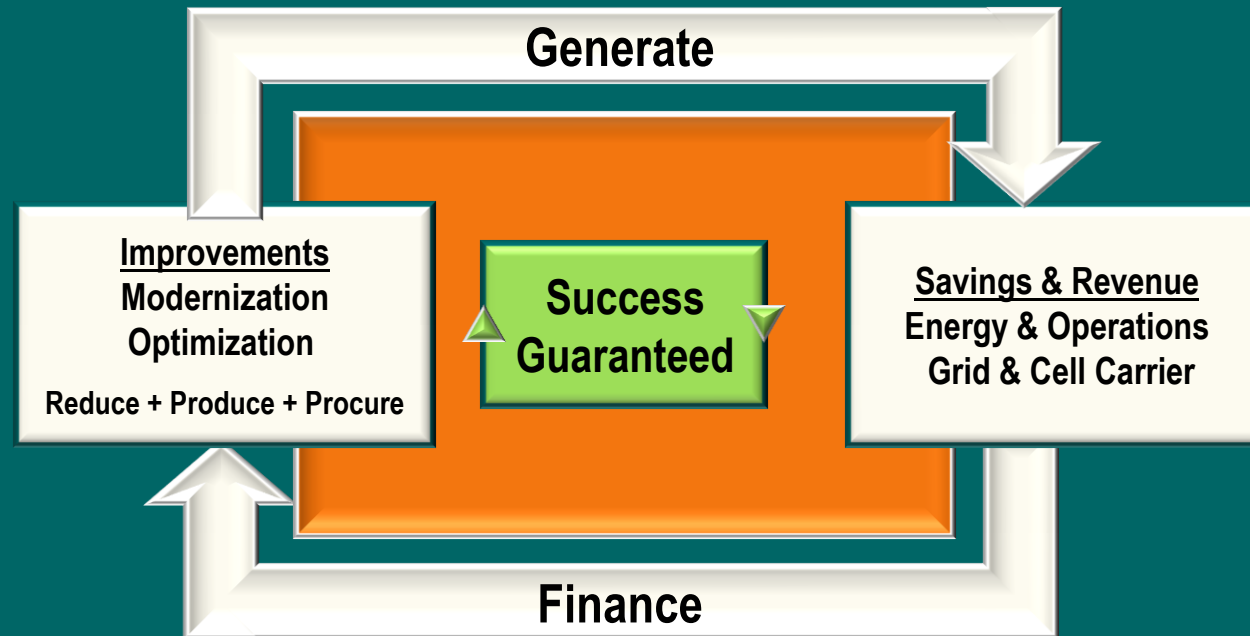
- ✓ First and foremost an established utility meter company
- ✓ Integrating AMR technology into streetlights

Guaranteed Performance Based Solutions

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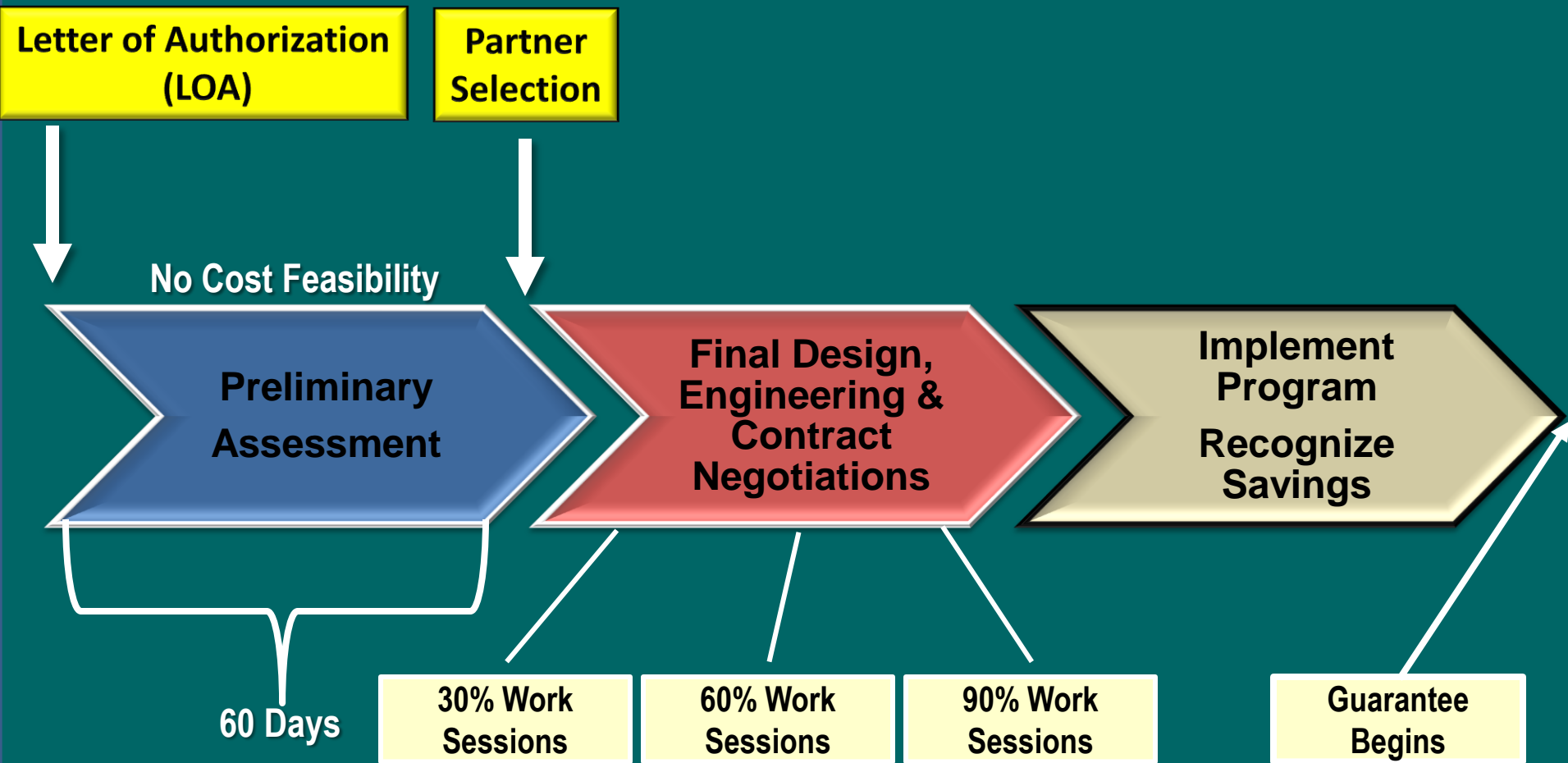


- ✓ Your Savings & Revenue Fund Improvements
- ✓ Siemens Guarantees Financial Outcomes



Process to Move Forward

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Questions



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The Technology Leader Making City Infrastructure Smarter